

<b>GEARTECH</b>	QUALITY PROCEDURE	No. QP1000	SHEET 1 OF 2																												
		Rev. A																													
Procurement Process		BY RLE	DATE	1/18/99																											
		CKD JRM	DATE	9/05/99																											
<div>1. Scope</div> <div>1.1 This procedure covers the steps involved in procuring gearboxes.</div> <div>2. Referenced Documents</div> <div>2.1 AGMA/AWEA 921-A97 Recommended Practices for Design and Specification of Gearboxes for Wind Turbine Generator Systems.</div> <div>2.2 GEARTECH Specifications:</div> <div><table><tr><td>CK1000</td><td>QP1000</td><td>Procurement process</td></tr><tr><td>CK2000</td><td>QP2000</td><td>Procurement specification</td></tr><tr><td>CK3000</td><td>QP3000</td><td>Bid solicitation and evaluation</td></tr><tr><td>CK4000</td><td>QP4000</td><td>Gearbox design audit</td></tr><tr><td>CK5000</td><td>QP5000</td><td>Quality assessment</td></tr><tr><td>CK6000</td><td>QP6000</td><td>Quality assurance plan</td></tr><tr><td>CK7000</td><td>QP7000</td><td>Manufacturing schedule</td></tr><tr><td>CK8000</td><td>QP8000</td><td>Manufacturing audit</td></tr><tr><td>CK9000</td><td>QP9000</td><td>Gearbox startup</td></tr></table></div> <div>3. Terminology</div> <div>3.1 Procurement process- The process of procuring gearboxes consisting of:</div> <div><ul style="list-style-type: none"><li>• Develop procurement specification</li><li>• Solicit bids</li><li>• Evaluate proposals/ select final bidders</li><li>• Meet for design reviews</li><li>• Select gear manufacturer</li><li>• Audit gearbox design</li><li>• Award contract</li><li>• Review and approve engineering drawings</li><li>• Review and approve quality assurance (QA) plan</li><li>• Review and approve manufacturing schedule</li><li>• Approve start of manufacturing</li><li>• Audit manufacturing</li><li>• Audit tests</li><li>• Audit gearbox startup</li></ul></div> <div>3.2 Bidder- Gear manufacturer who submits a proposal in response to bid solicitation.</div> <div>3.3 Gear specialist- An engineer knowledgeable in design, manufacturing, and application of gearboxes.</div> <div>3.4 Gear manufacturer- A manufacturer specializing in the manufacture of gearboxes.</div> <div>3.5 Purchaser- Company purchasing a gearbox from a gear manufacturer.</div>					CK1000	QP1000	Procurement process	CK2000	QP2000	Procurement specification	CK3000	QP3000	Bid solicitation and evaluation	CK4000	QP4000	Gearbox design audit	CK5000	QP5000	Quality assessment	CK6000	QP6000	Quality assurance plan	CK7000	QP7000	Manufacturing schedule	CK8000	QP8000	Manufacturing audit	CK9000	QP9000	Gearbox startup
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<p>3.6 Proposal- Gearbox design, QA Plan, manufacturing schedule, pricing, and warranty offered by a bidder.</p> <p>3.7 Contract- Agreement between purchaser and gear manufacturer.</p> <p>4. Significance and Use</p> <p>4.1 Procurement process- AGMA/AWEA 921-A97, Annex D explains the procurement process including procurement specification, QA plan, quality control tests, quality documentation, and responsibilities of purchasers and gear manufacturers (see CK1000).</p> <p>5. Procedure</p> <p>5.1 Checklists- CK2000 through CK9000 shall be used for guidelines for all aspects of the procurement process from writing the procurement specification to auditing gearbox startup.</p> <p>5.2 Quality procedures- QP2000 through QP9000 shall be used for quality procedures for all aspects of the procurement process from writing the procurement specification to auditing gearbox startup.</p> <p>5.3 Management- The procurement process involves many steps that evolve over time (typically at least one year). Therefore, the purchaser must have resources adequate to ensure that each step of the procurement process is properly implemented and all requirements of the procurement specification are met. See CK1000 for overall guidelines covering the procurement process.</p>				